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EXAMINER

WILLIAMS, AARON

ART UNIT	PAPER NUMBER
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2889

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08/06/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,999	Applicant(s) FORTUNA ET AL.	
	Examiner Aaron Williams	Art Unit 2889	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/24/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figures 1, 11 and 12 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Figure 1 is missing described items conductive wires 24 and 29. In figure 3A item ultraviolet enhancer 28 needs to be pointed out in the figure. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to because the graphs 4 – 10 needs to be labeled and all legends need to be complete. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase “Not Applicable” should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

4. The claims are objected to because they include reference characters which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US

Patent 5,719,463 to Hassink et al., herein refer to Hassink, and in further view of US

Patent 7,187,111 to Johanning, herein refer to Johanning.

Regarding claim 1 Hassink discloses in figures 1 – 2, **In an electric lamp having a power of about ≥ 175 W to about 400 W** (Lamp assembly (A) disclosed as in column 2 lines 51 – 56) , **a light source capsule** (arc tube (11)) **energizeable for emitting light and including a generally planar seal sealing said capsule in a gas-tight manner, said seal having two generally parallel major faces and two opposing minor faces extending transversely between said major faces** (refer to column 3 lines 45 - 56), **a stem portion and at least one support rod extending adjacent a minor face of said seal** (in figure 1 the support rod includes first conductor

wire (33) fits this limitation with reference to column 4 lines 5 – 25 which explains that the present invention orientation can be changed such that this limitation can be met), **the improvement wherein said lamp** (Lamp assembly (A)) **has a strapless mount structure comprising a main frame portion** (figure 1 shroud mechanical support means (13) including shroud (12) and first conductor wire (33) and second conductor wire (34) fully describe in column 3 lines 64 - 67); **a first metallic support rod** (stem lead (22) column 3 line 22) **extending from said stem** (glass stem (20) column 3 line 16) **portion and fixed** (by connecting to lead (33)) **to said main frame portion; a second metallic support rod engaging said dome** (lead (33) engages dome (19) a part (38)) **end of said envelope and fixed to said main frame portion**, but fails to teach **and a support clip attached at one end to the lower end of the arc tube press, and at a second end to the stem wire or to a frame portion connected to the stem wire or to a portion of the main frame**. However Hassink does disclose that his invention could be made with a closed type of structure, i.e. without a shroud, in column 2 lines 1 - 5.

Johanning teaches two frame structures one of the frame structures in figures 13a – 17b shows a support clip (figure 14A tube clip (140)) attached to the stem wire to and to the arc tube (112). Johanning provides motivation to combine in column 9 lines 10 -13 and 43 – 45. Where he states the tube clips (140) provide mechanical support to arc tube (112) and prevent axial movement of the arc tube (112).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Hassink's arc tube structure with the support clips of

Johanning to increase mechanical stability. Both the Hassink's and Johanning's invention are in the same field of endeavor (high intensity discharge lamp) and are directed to the same problem sought to be solved (optimizing the support structure of HID's lamps).

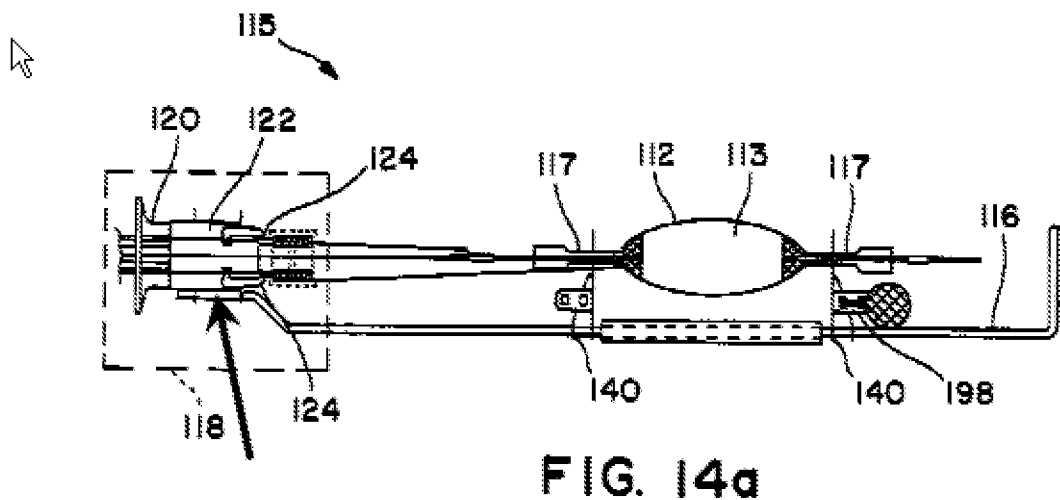
The Examiner notes that the limitations in claim 1, **"In an electric lamp having a power of about ≥ 175 W to about 400 W"** is an intended use type limitation. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention over the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Regarding claim 2 Hassink discloses and Johanning teaches, **an electric lamp as claimed in claim 1**, Johanning fails to directly teach **wherein the support clip is a vertical clip which at one end is welded to the arc tube lead and restrains the arc tube from lateral, centrifugal, and longitudinal motion**. Hassink discloses in column 4 lines 18 - 25 that the geometry of the stop could be modified. It would be obvious to make the stops vertically clip to provide more support.

Regarding claim 3 Hassink discloses and Johanning teaches, **an electric lamp as claimed in claim 2**, Johanning fails to directly teach **wherein the vertical clip is attached at a second end to the stem wire**. Hassink discloses in column 4 lines 18 -

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25 that the geometry of the stop could be modified. It would be obvious to make the stops vertically clip to provide more support.



Regarding claim 4 Hassink discloses and Johanning teaches, **an electric lamp as claimed in claim 1**, Johanning further teaches **wherein the support clip is a horizontal clip which at one end slides over the arc tube and firmly restrains the arc tube from lateral, centrifugal, and longitudinal motion**. Refer in column 9 lines 10 - 15 and 43 - 45 where support clip (140) is described.

Regarding claim 5 Hassink discloses and Johanning teaches, **An electric lamp as claimed in claim 4, Johanning further teaches wherein the horizontal clip is attached at a second end to the a portion of the main frame.** Refer to the picture below and column 9 lines 10 - 15 and 43 – 45 where support clip (140) is described.

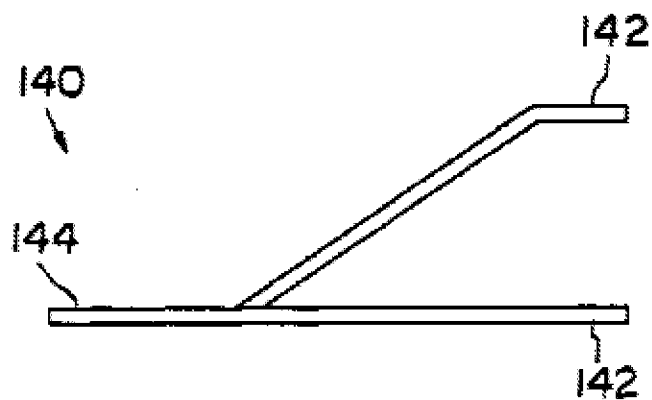


FIG. 17a

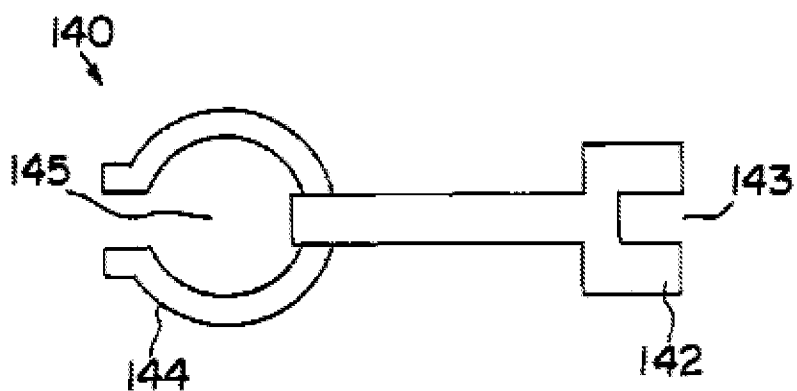
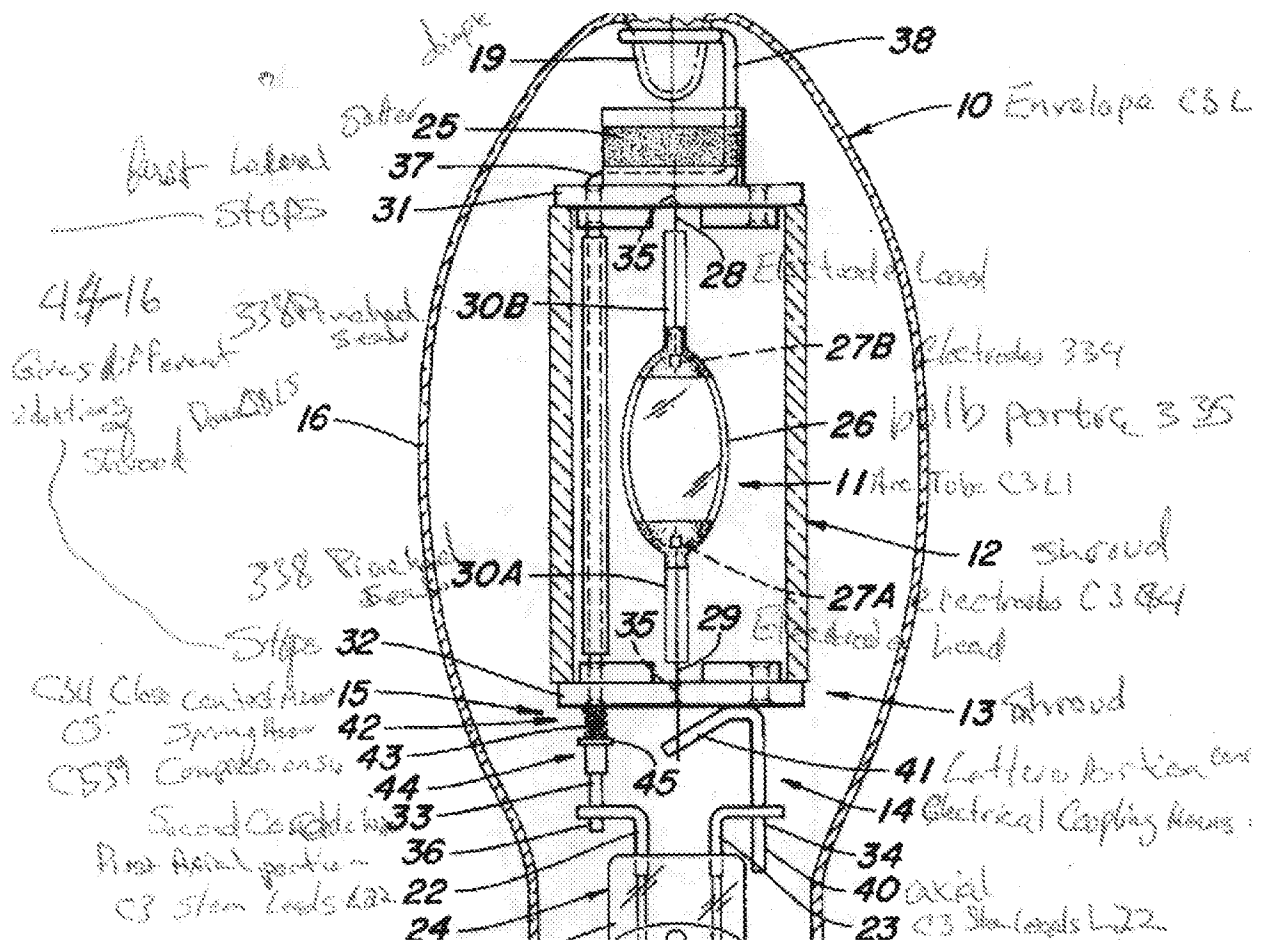


FIG. 17b

(143) Holds portion (130) of
frame (116)
(145) Holds portion (117) of arc
tube (112)

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Regarding claim 6 Hassink discloses and Johanning teaches, **an electric lamp as claimed in claim 1**, Hassink further discloses **wherein said light source capsule is electrically connected in said lamp in the absence of a field wire**. Refer to the picture below where there is no field wire shown. Further the use field wire is not necessary in Hassink's invention because the conductive wires (33, 34) are electrically connected to the stem mount through stem lead wires (22, 23).



Regarding claim 7 Hassink discloses and Johanning teaches, **an electric lamp as claimed in claim 1**, Hassink further discloses **wherein said strapless mount**

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structure is effective to reduce sodium diffusion in said lamp. Hassink further describes how US patent 5,493,167 is incorporated by reference in column 4 lines 10 - 11 which teaches the insulator around conductor wire and stops (31, 32) are effective in preventing sodium loss.

Regarding claim 8 Hassink discloses and Johanning teaches, **an electric lamp as claimed in claim 1, 2 or 4,** Hassink further discloses **wherein an insulative covering is present on at least a portion of said main frame.** Hassink further describes how US patent 5,493,167 is incorporated by reference in column 4 lines 10 - 11 which teaches the insulator around conductor wire is effective in preventing sodium loss.

Regarding claim 9 Hassink discloses and Johanning teaches, **an electric lamp as claimed in claim 1, 2 or 4,** Hassink further discloses **wherein said lamp is a high pressure discharge lamp and said light source capsule is a discharge vessel having a press seal at opposing ends thereof, discharge electrodes arranged within said discharge vessel, and a discharge sustaining filling in which a discharge is maintained between said discharge electrodes during lamp operation.** Refer to column 3 lines 30 – 43 where the third picture in the present office action described.

Regarding claim 10 Hassink discloses in figures 1 – 2, **a high pressure gas discharge lamp having a power of about ≥ 175 W to about 400 W** (this an intended use limitation please see paragraph below) **and comprising: an outer lamp envelope** (envelope 10 column 3 line 1) **including a lamp stem** (glass stem 20 column 3 line 16) **and an opposing dome end** (dome 16); **a light source** (arc tube column 3 line 1) **arranged generally axially** (center axis 17) **within said outer lamp envelope** (envelope 10 column 3 line 1), **said light source including a discharge vessel** (arc tube column 3 line 1) **consisting of a fused silica body and having a planar press seal at each end thereof, an alkali-halide containing discharge sustaining filling, a pair of discharge electrodes within said discharge vessel body between which an arc discharge is maintained during lamp operation** (Refer to column 3 lines 30 – 43 where the third picture in the present office action described), **and conductive lead-throughs extending from each electrode through a respective press, seal to the exterior of said discharge vessel, said press seal having two generally parallel major faces and two opposing minor faces extending between said major faces** (Refer to column 3 lines 30 – 43 where the third picture in the present office action described), **said discharge vessel emitting ultraviolet radiation** (this an intended use limitation please see paragraph below) **during lamp operation; wherein said lamp has a strapless mount structure which comprises a main frame portion** (figure 1 shroud mechanical support means (13) including shroud (12) and first conductor wire (33) and second conductor wire (34) fully describe in column 3 lines 64 - 67); **a first metallic support rod** (stem lead (22) column 3 line 22) **extending from said lamp**

stem and fixed to said main frame portion; a second metallic support rod engaging said dome end of said envelope and fixed to said main frame portion (lead (33) engages dome (19) a part (38)); but fails to teach **and a support clip attached at one end to the lower end of the arc tube press, and at a second end to the stem wire or to a frame portion connected to the stem wire or to a portion of the main frame.** However Hassink does disclose that his invention could be made with a closed type of structure, i.e. without a shroud, in column 2 lines 1 - 5.

Johanning teaches two frame structures one of the frame structures in figures 13a – 17b shows a support clip attached to the stem wire to and to the arc tube. Johanning provides motivation to combine in column 9 lines 10 -13 and 43 – 45. Where he states the support clips provide mechanical support and prevent axial movement of the arc tube.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Hassink's arc tube structure with the support clips of Johanning to increase mechanical stability. Both the Hassink's and Johanning's invention are in the same field of endeavor (high intensity discharge lamp) and are directed to the same problem sought to be solved (optimizing the support structure of HID's lamps).

The Examiner notes that the limitations in claim 10, **“a high pressure gas discharge lamp having a power of about ≥ 175 W to about 400 W”** and **“said discharge vessel emitting ultraviolet radiation during lamp operation”** is an intended use type limitation. A recitation of the intended use of the claimed invention

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must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention over the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Regarding claim 11 Hassink discloses and Johanning teaches, **A high pressure gas discharge lamp as claimed in claim 10**, Hassink further discloses **wherein said light source is electrically connected in said lamp in the absence of a field wire**. Refer to the third picture, in the present office action, where there is no field wire shown. Further the use field wire is not necessary in Hassink's invention because the conductive wires (33, 34) are electrically connected to the stem mount through stem lead wires (22, 23).

Regarding claim 12 Hassink discloses and Johanning teaches, **A high pressure gas discharge lamp as claimed in claim 11**, Hassink further discloses **wherein said strapless mount structure is effective to reduce sodium diffusion in said lamp**. Hassink further describes how US patent 5,493,167 is incorporated by reference in column 4 lines 10 -11 which teaches the insulator around conductor wire and stops (31, 32) are effective in preventing sodium loss.

Regarding claim 13 Hassink discloses and Johanning teaches, **a high pressure gas discharge lamp as claimed in claim 10 or 11**, Hassink further discloses **wherein**

an insulative covering is present on at least a portion of said main frame. Hassink further describes how US patent 5,493,167 is incorporated by reference in column 4 lines 10 -11 which teaches the insulator around the conductor wire is effective in preventing sodium loss.

Regarding claim 14 Hassink discloses in figures 1 – 2, **a strapless mount for a light source of an electric lamp of about ≥ 175 W to about 400 W** (this an intended use limitation please see paragraph below), **having an outer lamp envelope** (envelope 10 column 3 line 1) **including a lamp stem** (glass stem 20 column 3 line 16) **and an opposing dome end** (dome 16) **and a generally planar seal with a pair of generally parallel major faces and a pair of minor faces extending therebetween** (arc tube (11) refer to column 3 lines 16 - 25), **said mount comprising a main frame portion** (figure 1 shroud mechanical support means (13) including shroud (12) and first conductor wire (33) and second conductor wire (34) fully describe in column 3 lines 64 - 67); **a first metallic support rod extending from said lamp stem and fixed to said main frame portion** (stem lead (22) column 3 line 22); **a second metallic support rod engaging said dome end of said envelope and fixed to said main frame portion** (lead (33) engages dome (19) a part (38)); but fails to teach **and a support clip attached at one end to the lower end of the arc tube press, and at a second end to the stem wire or to a frame portion connected to the stem wire or to a portion of the main frame.** However Hassink does disclose that his invention could be made with a closed type of structure, i.e. without a shroud, in column 2 lines 1 - 5.

Johanning teaches two frame structures one of the frame structures in figures 13a – 17b shows a support clip attached to the stem wire to and to the arc tube. Johanning provides motivation to combine in column 9 lines 10 -13 and 43 – 45. Where he states the support clips provide mechanical support and prevent axial movement of the arc tube.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Hassink's arc tube structure with the support clips of Johanning to increase mechanical stability. Both the Hassink's and Johanning's invention are in the same field of endeavor (high intensity discharge lamp) and are directed to the same problem sought to be solved (optimizing the support structure of HID's lamps).

The Examiner notes that the limitations in claim 14, **“a light source of an electric lamp of about ≥ 175 W to about 400 W”** is an intended use type limitation. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention over the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Regarding claim 15 Hassink discloses and Johanning teaches, **a strapless mount for a light source of an electric lamp as claimed in claim 14, wherein an insulative covering is present on at least a portion of said main frame.** Hassink further describes how US patent 5,493,167 is incorporated by reference in column 4

lines 10 -11 which teaches the insulator of the conductor wire is effective in preventing sodium loss.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Williams whose telephone number is (571) 270-5279. The examiner can normally be reached on Monday thru Friday 7:00 to 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Toan Ton can be reached on (571)272-2303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aaron Williams/
Examiner, Art Unit 2889

/Karabi Guharay/
Primary Examiner, Art Unit 2889

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